

REMARKS

Applicant is in receipt of the Office Action mailed September 29, 2003. Claims 1-47 are currently pending in the case. Further consideration of the present case is earnestly requested in light of the following remarks.

Section 102 Rejections

Claims 1, 3, 5-11, 13-16, 36, 37, 39-43, and 45-47 were rejected under 35 U.S.C. 102(b) as being anticipated by McKaskle et al. (US 5,481,741, "McKaskle"). Applicant respectfully disagrees.

Claim 1 recites:

1. A method for creating a graphical program which performs register accesses in a hardware device, wherein the method operates in a computer including a display screen and a user input device, the method comprising:

displaying on the screen a register access node in the graphical program in response to user input; and

configuring the register access node to access one or more registers of a hardware device;

wherein, during execution of the graphical program, the register access node is operable to access the one or more registers of the hardware device.

As the Examiner is surely aware, anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The identical invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Regarding claim 1, the Office Action asserts that McKaskle teaches a method for creating a graphical program which performs register accesses in a hardware device, wherein the method operates in a computer including a display screen and a user input

device (col. 5, lines 46-61), including “displaying on the screen a register access node in the graphical program in response to user input”, and “configuring the register access node to access one or more registers of a hardware device”, citing Figure 99, col. 49, lines 49-56. Applicant respectfully disagrees.

Applicant notes that in col. 5, lines 46-61, McKaskle describes an attribute node whereby a user may “programmatically access various parameters of a control or indicator”, where attributes are defined as “parameters of a control or indicator on the front panel which can be programmatically accessed...”. As clearly described throughout McKaskle (e.g. col. 4, lines 37-62, col. 5, lines 46-61, etc.), the controls and indicators described with regards to McKaskle’s system are software constructs on a front panel (also a software construct) of a virtual instrument (VI), and are specifically not elements of hardware devices, where the attribute nodes of McKaskle provide access to these software based controls and indicators. This is in contrast to the register access nodes of the present Application, which operate to “access one or more registers of a hardware device”.

Applicant further notes that the cited McKaskle passage of col. 49, lines 49-56 describes shift registers for While Loops and For Loops (see lines 34-36) and attribute nodes for configuring them. As shown in Figure 99 and described in the passage, these shift registers are used to provide data values across iterations in a graphical program, e.g., providing a value at the end of an iteration of a While or For Loop to the beginning of a subsequent iteration of the loop. In other words, the shift registers described in McKaskle are also software constructs, being part of the graphical program, and specifically do not refer to hardware device registers. Applicant respectfully suggests that’s the Examiner has incorrectly interpreted these software based shift registers as hardware device registers. Thus, Applicant respectfully submits that McKaskle does not teach these features of claim 1.

The Office Action further asserts that McKaskle teaches “wherein, during execution of the graphical program, the register access node is operable to access the one

or more registers of the hardware device”, citing Figure 13, col. 26, lines 2-27. Applicant respectfully disagrees.

As stated in the cited passage, “Figure 13 shows an illustrative block diagram of a sequence structure”, where a sequence structure “serves to divide a data-flow diagram into two subdiagrams” (see col. 25, lines 33). In other words, the sequence structure is one example of a structure node for use in a graphical program, other examples being loops and conditionals (see col. 25, lines 11-30). Thus, as mentioned above, the registers of McKaskle, such as those shown in Figure 13 and described in the cited passage, refer to software constructs, and specifically do not refer to hardware device registers. Thus, Applicant respectfully submits that McKaskle does not teach “wherein, during execution of the graphical program, the register access node is operable to access the one or more registers of the hardware device”.

Applicant respectfully submits that McKaskle neither teaches nor suggests the features and limitations of claim 1, and thus, claim 1, and claims dependent thereon, are patentably distinct from McKaskle, and are allowable for at least the reasons provided above. Independent claims 17, 36, 37, and 43 contain limitations similar to claim 1, and so the arguments presented above apply to these claims with equal force. Applicant thus respectfully submits that for at least those reasons, these claims, and claims respectively dependent thereon, are patentably distinct from McKaskle, and are thus allowable.

Thus, Applicant respectfully requests removal of the 35 U.S.C. 102(b) rejection of claims 1, 3, 5-11, 13-16, 36, 37, 39-43, and 45-47.

Section 103 Rejections

Claims 2, 38, and 44 were rejected under 35 U.S.C. 103(a) as being unpatentable over McKaskle in view of Sojoodi et al. (US 5,847,953, “Sojoodi”). Applicant respectfully disagrees.

As held by the U.S. Court of Appeals for the Federal Circuit in *Ecolchem Inc. v. Southern California Edison Co.*, an obviousness claim that lacks evidence of a suggestion

or motivation for one of skill in the art to combine prior art references to produce the claimed invention is defective as hindsight analysis.

In addition, the showing of a suggestion, teaching, or motivation to combine prior teachings “must be clear and particular Broad conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence’.” *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). The art must fairly teach or suggest to one to make the specific combination as claimed. That one achieves an improved result by making such a combination is no more than hindsight without an initial suggestion to make the combination.

Applicant first notes that for at least the reasons provided above, McKastle fails to teach an access node which is operable to access one or more registers of a hardware device, and so Applicant submits that McKastle fails to teach the features and limitations of claim 1.

Regarding claim 2, the Office Action asserts that Sojoodi teaches a system that configures a register access node, including “displaying a list of registers”, citing Figure 7, col. 17, lines 17-46, and “receiving user input to select one or more of the registers from the list of registers”, also citing Figure 7, col. 17, lines 17-46. Applicant respectfully disagrees.

Applicant notes that the cited figure and passage in Sojoodi does not teach or describe a system that configures a register access node, but rather describes various graphical program node parameters for a graphical program node related to VISA operations. More specifically, Figure 7 is a screen shot “illustrating the terminals of a VISA Write function node”, i.e., illustrating the various input and output terminals of the function node, which allow the node to be wired or connected to other nodes in the graphical program. Thus, not only is the displayed node not a register access node, but the terminals displayed are not registers for a hardware device.

Thus, Applicant respectfully submits that Sojoodi neither teaches nor suggests a system that configures a register access node, including “displaying a list of registers” and “receiving user input to select one or more of the registers from the list of registers”. Applicant further submits that neither McKastle nor Sojoodi provides a motivation to

combine the references, and that even if the references were combined, they would not produce the limitations of claim 2.

Thus, Applicant respectfully submits that neither McKastle nor Sojoodi, either singly or in combination, teaches or suggests the features and limitations of claim 2 (which, of course, includes the limitations of claim 1), and so claim 2 is patentably distinct and unobvious over McKastle in view of Sojoodi, and is thus allowable for at least the reasons provided above.

Thus, Applicant submits that the 103 rejection of claim 1 based on McKastle and Sojoodi is improper. Claims 38 and 44 include similar limitations as claim 2, and so the arguments presented above with respect to claim 1 apply to these claims as well. Applicant respectfully requests removal of the 103 rejection of claims 2, 38, and 44.

Applicant also asserts that numerous others of the dependent claims recited further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

Thus, for at least the reasons provided above, Applicant respectfully submits that claims 1-47 are patentably distinct over the cited art, and are thus allowable.

CONCLUSION

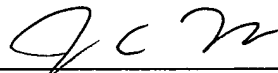
Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5150-38200/JCH.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☒ Notice of Change of Address

Respectfully submitted,



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